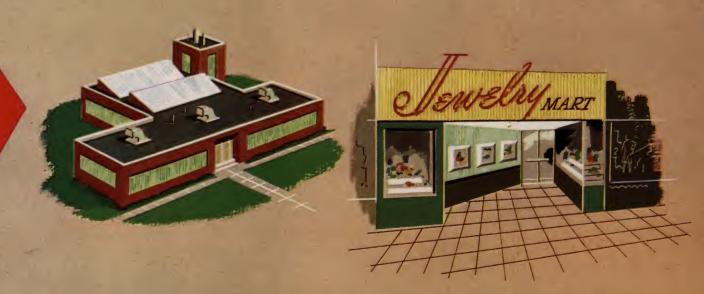


INDUSTRIAL COMMERCIAL RESIDENTIAL applications







American Panal, a laminate of polyester resins and fiberglass, is a translucent structural and decorative material. Because it is made by American's exclusive continuous mechanical process, it is uniform in color, thickness and strength. It is stronger than metal of equal weight and highly resistant to shattering, crazing, fading, sharp blows and vibration. It is easily and economically installed with ordinary tools and requires little or no maintenance. Panal can be fitted to curved surfaces. It is light in weight (approximately 8 oz. per square foot) and easy to handle. It offers in one product the combined advantages of translucency, decorative beauty and strength. Panal is manufactured by American Panal Incorporated, a subsidiary of American Window Glass Company, a leader in American industry since 1889.

a wide range of applications

industrial

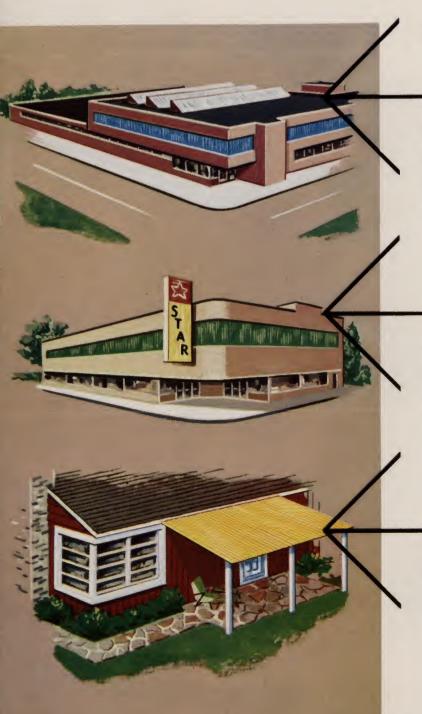
Ideal for skylighting and for side-wall and endwall lighting. Nests with corrugated metals and can be installed with the same fasteners. For easily moved office partitions, diffused indirect lighting and decorative uses.

commercial

For store fronts and signs, for skylighting that provides natural or flattering light in retail stores. For display panels and partitions. For sparkling decorative and lighting effects.

residential

For patio and porch roofs, awnings, canopies, windscreens and fences, room partitions and dividers, shower and tub enclosures, skylighting, earports, garage doors, for decorative uses and for indirect lighting.





CORRUGATIONS SIZES and TECHNICAL DATA

corrugations and sizes

LENGTH OF SHEETS—Panal is available in sheets from 4' through 12' in length in increments of 6". Longer sheets up to 24' are available on special order. The only additional cost is for special packing.

corrugations and in flat sheets. The first figure under corrugations is the distance from the crown of one corrugation to the crown of the next. The second figure is the depth of the corrugation.

STANDARD CORRUGATIONS

Corrugations	Width	Cor. per Panel	Position of Edges
1 1/4" x 1/4" 2 2/3" x 1/2" Flat	26" 26" 27½" 34" 40" 24", 30", 36", 40",	10	Up & Down Both Down Up & Down Both Down Both Down
	45"		

SPECIAL CORRUGATIONS

Corrugations	Width	Cor. per Panel	Position of Edges
1 ½" × ¾8" 2 ½" × ½" 4.2" × ½"	26" 34" 35" 42"	13	Up & Down Both Down Up & Down Both Down

light and heat transmission

*The Transmission and Absorption of Daylight, Ultra-violet and Infrared

The table below shows the transmission and absorption of light by the various Panal colors in comparison with clear window glass.

	Light Transmission	Ultra-violet Absorption	
Clear Window Glass	91%	17.7%	12.4%
Crystal	85.6%	62.6%	33.7%
Opal White	52.6%	91.4%	72.3%
Peridot Green	66.1%	80.5%	48.3%
Topaz Yellow	66.4%	87.9%	57.1%
Jasper Green	71.7%	72.5%	42.6%
Rose Quartz	37.3%	95.3%	70.8%
Aquamarine	55.9%	88.1%	46.8%
Emerald Green	47.8%	96.9%	50.5%

*The Comparative Absorption and Transmission of Solar Heat Radiation

The table below shows the absorption and transmission of solar heat of the various Panal colors in comparison with clear window glass and heat-resisting glass.

	Surface Temperature of Material	Temperature of Air Behind Material
Clear Window Glass	112° F.	183° F.
Heat-Resisting Blue Glass	135° F.	152° F.
Panal Crystal	130° F.	175° F.
Panal Opal White	113° F.	144° F.
Panal Topaz Yellow	114° F.	164° F.
Panal Peridot Green	121° F.	163° F.
Panal Jasper Green	127° F.	165° F.
Panal Emerald Green	134° F.	150° F.
Panal Rose Quartz	124° F.	156° F.
Panal Aquamarine	118° F.	152° F.

^{*}These figures are the result of a scientific study made by the Electrical Testing Laboratories of New York. Further information available on request.

other technical data

STRENGTH

Tensile—10,000 to 12,000 PSI Barcol Hardness—50 to 60.

LOADING

Standard 1/16" THICK PANELS (2 oz. mat)—22/3" x 1/2" Corrugation—will support over 100#/sq. ft. on a 4' span.

EXPANSION

The coefficient of linear thermal expansion of PANAL is .000015 in./in./°F. Approximately the same as aluminum.

STABILITY

Temperatures as low as -22° F. and as high as +200° F. have little or no effect on the physical properties of PANAL.

IMPACT RESISTANCE American PANAL is shatter-resistant and will withstand normal impacts, vibrations and hail.

CHEMICAL RESISTANCE

Tests show that PANAL is resistant to alkalies, common solvents and both mild and strong acids.

WATER ABSORPTION American PANAL is resistant to water absorption. The absorption rate is 0.56% during 24 hours immersion at 75° F.

ENDURANCE

The mechanical process by which American PANAL is produced insures a product that is durable. It will not sag, warp or buckle when properly installed under ordinary conditions.

FIRE RESISTANCE American PANAL is fire resistant. Although not classified as fireproof material, the fiber-glass component is fireproof and acts as a barrier to flames; cinders and matches falling on the surface will not ignite PANAL. A temperature of over 800° F. is necessary to start combustion on the surface.

OPAL WHITE

CRYSTAL

PERIDOT GREEN

The regular PANAL colors were selected by the widely known color authority, Faber Birren. Mr. Birren is the author of fifteen books and innumerable articles on the color tastes of the American public. He has made a life-long study of color preferences. The regular PANAL colors have been scientifically chosen by Mr. Birren as those colors most popular now and most likely to remain highest in color preference.



Ideal where minimum solar heat absorption and transmission are wanted with high light transmission. Recommended for hot climates and south and west exposures. Ideal for converting strong sunlight to soft, diffuse illumination.

CRYSTAL

Highest in light transmission. Recommended where all possible light is wanted—particularly appropriate for north and east exposures.

PERIDOT GREEN

Scientifically designed for high transmission in the yellow to yellow-green region of the spectrum where visibility is highest for the human eye. Highly recommended for installations where good light (free of glare), heat control and beauty are all wanted in one scientifically unique color.

JASPER GREEN

One of the most popular colors with almost universal applications. Excellent for offices and for industrial plants in southern regions, for patio roofs, canopies, awnings, windbreaks and similar uses. Psychologically cool and pleasing in appearance.

EMERALD GREEN

Medium light transmission (47.8%) highly resistant to solar heat. Ideal for awnings, screens, porch enclosures and for office partitions, panels and decorative fronts. Will resist heat, cut down the brilliance of sunlight and be cool and fresh appearing to the eye.

AQUAMARINE

Complements Rose Quartz. Cool, fresh appearance and low heat transmission make it ideal for hot climates where the double advantage of reduced light and reduced heat may be necessary.

ROSE QUARTZ

A warm tint suggesting the glow of a sunset or an open fireplace. Flattering to complexions and therefore most appropriate for women's stores, beauty parlors, solariums. Also ideal for skylights and partitions.

TOPAZ YELLOW

Warm, sunny quality makes it ideal for interiors or for patios, courts, solariums, recreation areas. Creates with ordinary light the illusion of direct, mellow sunlight.

AWNING COLORS

PANAL also is made in five colors designed primarily for use in awnings. The colors are Awning Yellow, Awning White, Awning Blue, Awning Green and Awning Red. These colors are much more opaque than regular PANAL colors. All awning colors can be furnished in crinkle finish.

American PANAL has two general types of usefulness. The first is functional, where Panal is used to control glare, reduce the intensity of sunlight and cut down ultra-violet and infrared radiation. Its most prominent functional applications are in industrial and commercial skylighting and side and end-wall lighting, and in residential roofing and skylighting. The second type of usefulness is decorative. This use has innumerable industrial, commercial and residential applications that remain to be discovered by the imaginative architect or designer. Although relatively new, the product has undergone comprehensive tests that insure its strength, beauty, permanence and economy.

JASPER GREEN

EMERALD GREEN

AQUAMARINE

ROSE QUARTZ

TOPAZ YELLOW



INCORPORATED

PITTSBURGH 12, PA.

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CRYSTAL

PERIDOT GREEN

- COLORS by Jahn Bruen

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TOPAZ YELLOW

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AMERICAN Pana

panal

INCORPORATED

PITTSBURGH 12, PA.

DISTRIBUTED BY

PENNSYLVANIA WIRE GLASS CO. WEST PARK WAY

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